Features

- Ultra-Small Surface Mount Package
- Low turn on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

150mW,70V Schottky Barrier Diode

Maximum Ratings

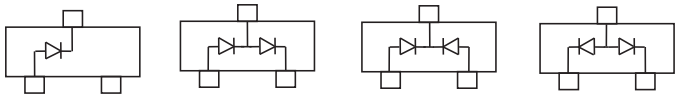
- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 667°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAS70T	7C	70V	70V
BAS70-04T	7D	70V	70V
BAS70-05T	7E	70V	70V
BAS70-06T	7F	70V	70V

Electrical Characteristics @ 25°C Unless Otherwise Specified

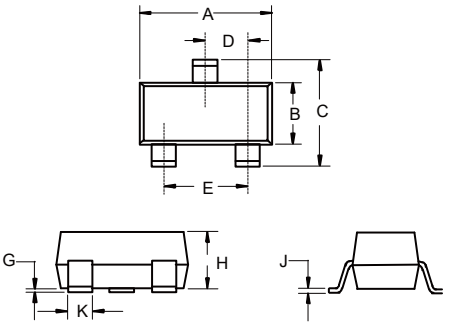
Average Forward Current	$I_{F(AV)}$	70mA	
Power Dissipation	P_d	150mW	T_A= 25 °C
Peak Forward Surge Current	I_{FSM}	100mA	t<1s
Maximum Forward Voltage	V_F	410mV 1000mV	I_F=1.0mA I_F=15mA
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.1μA	V_R = 50V
Maximum Reverse Breakdown Voltage	$V_{(BR)}$	>70V	I_R=10μA
Maximum Total Capacitance	C_T	2.0pF	Measured at 1.0MHz, V_R=0V
Maximum Reverse Recovery Time	t_{rr}	5.0ns	I_F=I_R=10mA, I_{rr}=1mA,R_L=100Ω

Internal Structure:



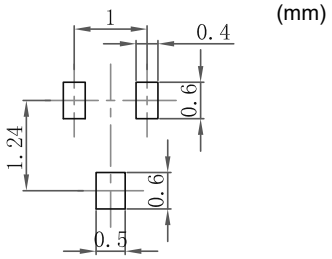
BAS70T BAS70-04T BAS70-05T BAS70-06T

SOT-523



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.030	0.033	0.75	0.85	
C	0.057	0.069	1.45	1.75	
D	0.020 Nominal		0.50 Nominal		
E	0.035	0.043	0.90	1.10	
G	0.000	0.004	0.00	0.10	
H	0.024	0.031	0.60	0.80	
J	0.004	0.008	0.10	0.20	
K	0.006	0.014	0.15	0.35	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

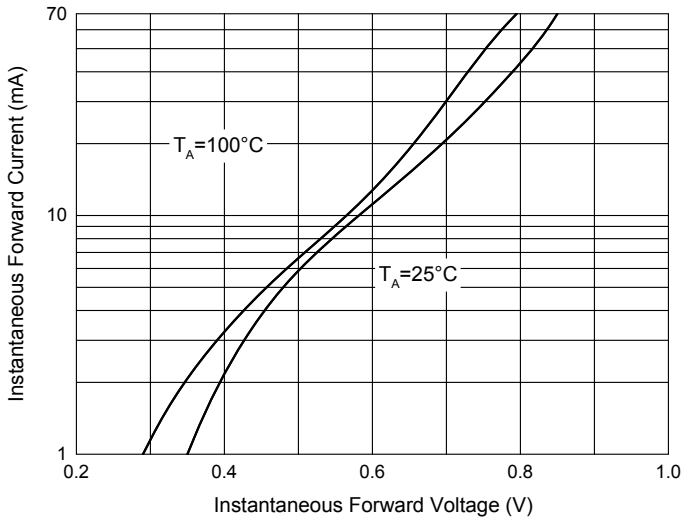


Fig. 2 - Typical Reverse Leakage Characteristics

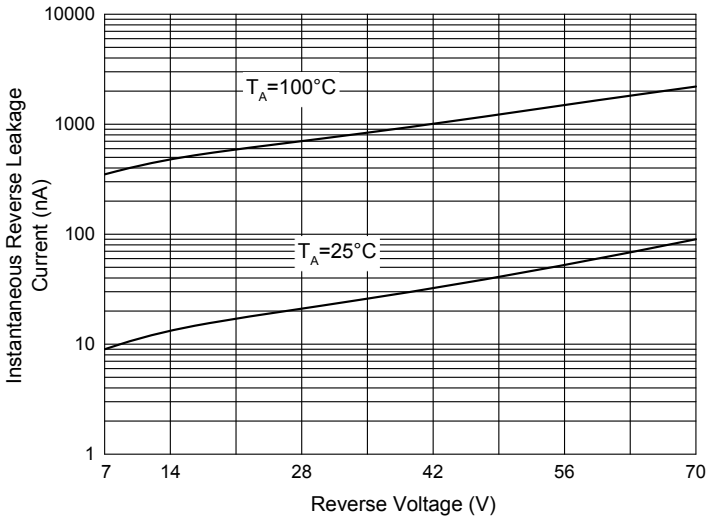
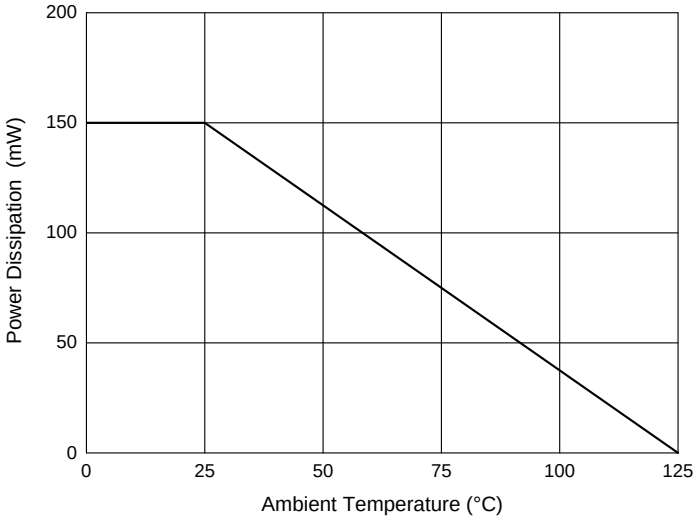


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF